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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,000	04/26/2001	Frank Charles Pagano	Rev 98-25	7885

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EXAMINER	
GOLLAMUDI, SHARMILA S	
ART UNIT	**PAPER NUMBER**
1616	

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/843,000	PAGANO ET AL.	
	Examiner	Art Unit	
	Sharmila S. Gollamudi	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19 and 21-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19 and 21-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Application

Receipt of Request for Continued Examination, Amendments to the claims, Remarks, Rule 1.131 Affidavit, and Information Disclosure Statement received on January 29, 2004 is acknowledged. Claims **1-19 and 21-36** are pending in this application. Claim 20 stands cancelled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Rejection of claims 1, 3-10, 21-23, and 31-34 under 35 U.S.C. 102(b) as being anticipated by Perronin et al (3,991,007) is maintained.

Perronin discloses the preparation of pigmentary particles coated with an organic polymer. Perronin discusses the importance of pigments in many fields such as cosmetics. Note column 1, lines 10-12. Example 13 provides a composition with 278 parts a pigment, 350 parts heptane, 27 parts methyl methacrylate, and 7 parts acrylic acid. The methacrylate-acrylic acid copolymer is 80-20.

*Note that the preamble "nail enamel composition" does not hold since it does not denote any structural limitation to the composition itself.

Response to Arguments

Applicant argues that Perronin et al do not teach: 1) a composition capable of forming a film on a nail 2) a composition with instant glass temperature 3) instant 2 to 29% of a polar monomer 3) a composition with the instant intended use of the solvent.

Applicant's arguments have been fully considered but they are not persuasive. It should be first noted that "capable of forming a film" is viewed as an intended use phrase and if the prior art and the instant invention have similar compositions, then it is said that the prior art is capable of forming said use. The applicant has provided a rationale to support that this limitation would be met by the prior art since the prior art and instant invention have the same composition; thus the burden shifts to applicant to demonstrate otherwise. See MPEP 2112. Secondly, it is the examiner's position that since the copolymer is the same and it is in the same range as applicant, then it would inherently have the same glass transition temperature. Again, it is the applicant's burden to prove otherwise with factual evidence. See MPEP 2112. Furthermore, the claims recite that the polymer has a glass transition temperature of 5 to 90 degrees Celsius and not the entire composition as argued by applicant. In regards to the argument that the polar monomer is not taught in the instant range, the examiner points to example 13. Lastly, the examiner firstly points out that the claims are rejected on the basis of the intermediate composition of example 13 prior to the solvent being distilled and not the end product. This composition is the same as applicant's and thus this is the composition the examiner relies on to make the rejection.

Claims 1-14, 21-26, and 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Bednarek et al (6,254,878).

Bednarek et al disclose a nail polish composition containing acrylic polymers. The composition comprises a solvent system having no more than 30% water, 0.1-30% of a pigment, a film forming acrylic binder prepared from methacrylic monomer, and styrene and which further contains adhesion promoting monomers. See abstract. Example 1 discloses titanium dioxide or red iron oxide pigment (pigment), 0.1-15% bentonite clay (suspending agent), 3-10% dibutylphthalate plasticizer, butyl acetate solvent, and 40% acrylic polymer (20/70/10 wt. % butylmethacrylate-co-methacrylate-co-acrylic acid). Various polymers are taught with instant monomers are taught. The reference discloses the use of 0.1-20% of silicone glycol copolymer. See column 9, lines 5-7.

Response to Amendment

The Affidavit filed on January 29, 204 under 37 CFR 1.131 is insufficient to overcome the Bednarek et al (6,254,878) for the following reasons:

The Affidavit does not establish that the inventor had the teaching prior to the cited reference. The Rule 131 affidavit does not teach a nail enamel composition having the applicant's range and ingredients as contrasted with the same ranges and ingredients that the examiner relies on to make the anticipatory rejection. Therefore, the Rule 131 affidavit is not persuasive to overcome US patent 6,254,878 to Bednarek et al as a 102(e) reference.

Claims 1-8, 14-16, 21-23, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (5,571,603).

Chen et al discloses a quick drying aqueous nail polish. The nail polish contains water, 0.1-15% of a difunctional acrylated urethane oligomer, 2-20% of a an alpha-beta-ethylenically unsaturated carboxylic acid containing 3 to 10 carbon atoms (acrylic acid or methacrylic acid), 8-75% of an acrylate ester, and 8-75% of methacrylate ester (butyl methacrylate or methyl methacrylate). See examples and claims. The Tg of the composition is 20 to 60 Celsius. The examples disclose the use of instant solvents and water (note that that only a fraction of the solvent is removed). Chen et al disclose the use of plasticizers and coalescing solvents are utilized to modify the film forming characteristics of the nail polish and the amounts of each is "well known in the art." See column 4, line 46 to column 5, line 15. example 1 discloses adding 8.1 grams (0.8%) of triethyl citrate (plasticizer).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 15-16 and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarek et al (6,254,878).

As set forth, Bednarek et al disclose a nail polish composition containing acrylic polymers. The composition can comprise water in the solvent system of no more than 30% water. See abstract. Instant plasticizers are taught as conventional additives for nail polish compositions on column 8, lines 51-65. Silicone copolymers are taught in the amount of 0.1-20%. See column 9. Bednarek teaches the use of non-acrylic binders such as cellulosic film formers (nitrocellulose) for gloss and hardness. See column 6, line 30.

Bednarek et al do not exemplify the instant plasticizer, a silicone glycol copolymer, or nitrocellulose.

It is deemed obvious to one of ordinary skill in the art at the time the invention was made to include the instant additives in the composition of Bednarek. One would be motivated to do so since Bednarek teaches the instant additives are suitable in the nail composition. Bednarek teaches the use of plasticizers in the art is conventional and many are known in the art. Therefore, one would be motivated to use the instant plasticizer with the expectation of similar results. One would be motivated to add nitrocellulose in the composition act as an auxiliary agent to increase gloss and hardness as taught by the reference. Therefore, with the guidance of the prior art it is deemed obvious to add the instant additives to yield the instant formulation.

In regards to claims 27-32, it is deemed obvious to one of ordinary skill in the art at the time the invention was made to look to the guidance of Bednarek et al and utilize

the instant monomer combination. One would be motivated to do so through routine experimentation to obtain the best possible results since Bednarek teach a variety of monomer combinations with the criticality lying in that the binder is an acrylic copolymer and not the monomer combination itself. It is the position that a combination of two ethylenically unsaturated monomers and polar monomer would not have an adverse effect in the nail composition. It is noted further that applicant's claims also allow for the combination of two ethylenically unsaturated monomers and a polar monomer such as Bednarek's butylmethacrylate-co-methylmethacrylate-co-acrylic acid, which substantiates the examiner's position that this combination does not have an adverse effect in the nail composition.

Therefore, absent unexpected demonstrating that the presence of two nonpolar ethylenically unsaturated monomers and a polar monomer compared to the presence of one nonpolar ethylenically unsaturated monomer and a polar monomer, this is deemed an obvious parameter for a skilled artisan.

Response to Arguments

Applicant argues the claims language of claims 27-32.

Applicant's arguments are persuasive in that Bednarek does not clearly anticipate the instant claims, however the claims are rejected under obviousness and the reason is provided in the body of the rejection.

Claims 17-19 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarek et al (6,254,878) in view of Pagano et al (5,772,988).

As set forth, Bednarek et al disclose a nail polish composition containing acrylic polymers. Bednarek teaches that the nail composition matches the ability of nitrocellulose in it resistance to cracking, fading, chipping, and peeling. See column 1, lines 35-43.

Bednarek does not teach a kit.

Pagano et al disclose a nail composition containing butyl acetate, a copolymer with a polar monomer (acrylic acid) and a nonpolar ethylenically unsaturated monomer, pigments, a suspending agent (stearalkonium bentonite), silicone glycol copolymer, and a plasticizer (glyceryl tribenzoate) in instant amounts (Note examples). Monomer A (ethylenically unsaturated monomer) is in the amount of 30-95%, monomer B (acetoacetoxy moieties) in the amount of 5-50%, and monomer C (acrylic acid) in the amount of 1-20%. Note column 5, lines 24-29. Further, Pagano teaches an aqueous nail enamel composition (Note example 8). The kit contains the instant composition in container 1 with a cellulose polymer (nitrocellulose) and solvent in container 2. The cellulose film-former provides excellent wear characteristics and is applied as a basecoat and topcoat. The polymer composition is applied as the middle layer. See column 9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bednarek et al and Pagano et al and utilize a kit with a cellulose film-former. One would be motivated to do so since Pagano teaches the cellulose-film former improves the wear characteristics of the nail polish. Further, Bednarek teaches the use of cellulose film-formers for the same function.

Therefore, one would be motivated to utilize a kit formulation with the expectation of similar results.

Response to Arguments

Applicant has not specifically addressed the instant rejection. Therefore, the rejection is maintained.

New Rejections Based On IDS Submitted

Claims 9-13 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (5,571,603).

Chen et al discloses a quick drying aqueous nail polish. The nail polish contains water, 0.1-15% of a difunctional acrylated urethane oligomer, 2-20% of a an alpha-beta-ethylenically unsaturated carboxylic acid containing 3 to 10 carbon atoms (acrylic acid or methacrylic acid), 8-75% of an acrylate ester, and 8-75% of methacrylate ester (butyl methacrylate or methyl methacrylate). See examples and claims. The Tg of the composition is 20 to 60. The examples disclose the use of instant solvents and water (note that that only a fraction of the solvent is removed). Chen et al disclose the use of plasticizers and coalescing solvents are utilized to modify the film forming characteristics of the nail polish and the amounts of each is "well known in the art." See column 4, line 46 to column 5, line 15. example 1 discloses adding 8.1 grams (0.8%) of triethyl citrate (plasticizer). The composition contains additives such as pigments, dyes, fragrances, plasticizers, stabilizers, fillers, and antioxidants. See claim 17.

Chen et al do not exemplify acrylic acid or butyl methacrylate. Chen et al do the concentration of the additives are not exemplified.

It is deemed obvious to utilize the instant monomers since Chen et al discloses the suitability of acrylic acid as the alpha-beta-ethylenically unsaturated carboxylic acid containing 3 to 10 carbon atoms and butyl methacrylate as the methacrylate ester. Therefore, one would be expected to use the instant monomer with the expectation of similar results.

It is deemed obvious to one of ordinary skill in the art at the time the invention was made to include the instant additives in the composition of Chen et al. One would be motivated to do so since Chen et al teach the instant additives are suitable in the nail composition and are well known in the art. Further, the amount of additive is deemed as a manipulatable parameter known to those skilled in the art, which is done thorough routine optimization and experimentation.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (5,571,603) in view of Hosotte-Filbert et al (5,681,877).

Chen et al discloses a quick drying aqueous nail polish. The nail polish contains water, 0.1-15% of a difunctional acrylated urethane oligomer, 2-20% of a an alpha-beta-ethylenically unsaturated carboxylic acid containing 3 to 10 carbon atoms (acrylic acid or methacrylic acid), 8-75% of an acrylate ester, and 8-75% of methacrylate ester (butyl methacrylate or methyl methacrylate). See examples and claims. The Tg of the composition is 20 to 60. The examples disclose the use of instant solvents and water (note that that only a fraction of the solvent is removed). Chen et al disclose the use of plasticizers and coalescing solvents are utilized to modify the film forming characteristics of the nail polish and the amounts of each is "well known in the art." See

column 4, line 46 to column 5, line 15. Example 1 discloses adding 8.1 grams (0.8%) of triethyl citrate (plasticizer). The composition contains additives such as pigments, dyes, fragrances, plasticizers, stabilizers, fillers, and antioxidants. See claim 17.

Chen et al do the concentration of the additives are not exemplified.

Hosotte-Filbert et al teach the use of block polymers (acrylic acid and methyl methacrylate) as dispersing agents of pigments in cosmetics. See abstract. The nail varnish base utilized contains 10-15% nitrocellulose, 8-12% filler resin, 6-8% plasticizer, 65-75% solvents, 0.8-1.5% suspending agent, and the pigment is added depending on the desired color. See example 9.

It would have been obvious to one of ordinary skill I the art at the time the invention was made to look to the teaching of Hosotte-Filbert et al and utilize the instant amount of additives in Chen et al's nail varnish. One would be motivated to do so since Hosotte-Filbert et al teach a conventional nail varnish base and teaches the conventional amount of additives in the nail varnish, the criticality lying in the dispersible pigments taught by the reference and not the conventional nail varnish base utilized. Therefore, one would expect similar results utilizing a similar nail varnish base since as demonstrated by the prior art, the concentration of the additives in nail composition are well known to those skilled in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharmila S. Gollamudi whose telephone number is 571-

242-0614. The examiner can normally be reached on M-F (8:00-5:00) with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSG

April 12, 2004

MICHAEL G. HARTLEY
PRIMARY EXAMINER